

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICE OF THE INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

1301 CONSTITUTION AVENUE, NW WASHINGTON, DC 20004

### **SUMMARY REPORT**

GOLD KING MINE INCIDENT (ANIMAS RIVER) OI-HQ-2015-CFR-0108

# OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

CASE NO.: OI-HQ-2015-CFR-0108 DATE OPENED: August 13, 2015

CASE TITLE: GOLD KING MINE INCIDENT

(ANIMAS RIVER)

CASE CATEGORY: Employee Integrity OFFICE: San Francisco Field Office

Denver, Colorado

CASE AGENT:

JOINT AGENCIES: None JURISDICTION: District of

Colorado

### Introduction

The United States Environmental Protection Agency (EPA) Office of Inspector General (OIG) Office of Investigations (OI) conducted an investigation related to the August 5, 2015 release of mine water at the Gold King Mine (GKM) in response to the following:

- 1. In an August 12, 2015, letter to Inspector General Arthur A. Elkins Jr., Representatives of the Committee on Oversight and Government Reform, House of Representatives, Congress of the United States, requested the EPA OIG to conduct an independent investigation of the August 5, 2015 release of approximately three million gallons of mine water from the GKM in Silverton, Colorado.
- 2. In a September 2, 2015, letter to the OIG, Department of Natural Resources (DNR), identified seven assertions alleged to be factually inaccurate that were made in a report (b) (6), (b) (7)(C) regarding DNR's roles and responsibilities with respect to the release of mine water from the GKM on August 5, 2015.

3. In a September 18, 2015, letter to the OIG, Mark Brnovich, Attorney General (AG) for the state of Arizona, requested the EPA OIG to review the timeliness and methods of notification made to affected downstream stakeholders of the GKM following the release.

Upon receipt of the letters referenced above, the EPA OIG OI conducted an investigation and produced three Reports of Investigation (ROI). This document is a summary designed to give an overview of the OI investigative efforts related to the GKM; it does not contain details of the specific allegations investigated.

### Background

On August 5, 2015, representatives from the EPA and its contractors Environmental Restoration, LLC (Emergency and Rapid Response Services) and Weston Solutions, Inc. (Superfund Technical Assessment & Response Team) were conducting work at the GKM to assess the on-going water release from the mine, treat mine water, and assess the feasibility of further mine remediation. While excavating above the adit (an almost horizontal passage leading into a mine for the purposes of access or drainage), water began leaking, ultimately leading to the uncontrolled release of approximately three million gallons of mine water from behind the adit blockage into Cement Creek, a tributary of the Animas River.

On August 4, 2015, excavation was conducted in the area leading up to and alongside the GKM adit to remove consolidated soil and debris. The excavation goal was to expose, but not remove, the adit blockage. During this excavation, the adit blockage and mine timbers were exposed.

On August 5, 2015, excavation resumed above the previously exposed GKM adit blockage. During this excavation: (a) the ramp built to excavate above the GKM adit blockage made contact with the blockage, (b) the excavated soil from above the adit "buried" the adit blockage, (c) a large rock fell down and away from the unexcavated soil, and (d) water began to spurt out at or just slightly above the GKM adit brow. It took approximately 3-4 minutes for the spurt to grow into a flow of discolored water, and then took approximately 1 hour before the peak flow subsided.

### **Synopsis**

The three ROIs, reporting specific allegations and investigative results, are as follows:

1. As a result of the letter dated August 12, 2015, from the House Oversight and Government Reform Committee, Inspector General Elkins requested OI to determine whether any EPA employees or contractors engaged in criminal or administrative misconduct in connection with the GKM incident. (b) (6), (b) (7)(C)

The United States Attorney's Office (USAO) for the District of Colorado declined criminal prosecution (b) (6), (b) (7)(C) for potential violations of 18 U.S.C. § 1001 (False Statements) and 33 U.S.C. § \$1311 and 1319 (Direct Discharge to Waters of the United States.) This ROI is being submitted to EPA senior management

for review and for EPA to take whatever administrative actions deemed appropriate regarding (b) (6), (b) (7)(C) potential administrative misconduct.

- 2. As a result of the letter dated September 2, 2015, from the Colorado DNR, OI conducted an investigation to determine whether any (b) (6), (b) (7)(C) engaged in misconduct by falsifying information in the report issued by (b) (6), (b) (7)(C) a potential violation of 18 U.S.C. § 1001 (False Statements). OI uncovered no evidence that (b) (6), (b) (7)(C) engaged in misconduct. This ROI is being issued to EPA senior management for any corrective action deemed appropriate.
- 3. As a result of the letter dated September 18, 2015, from the Arizona AG, OI conducted an investigation to determine whether there was a delay in reporting the mine water release from the GKM to affected downstream stakeholders a potential violation of 42 U.S.C. § 9603(a) (Notification Requirements Respecting Released Substances). OI uncovered no evidence that any of the EPA employees involved in the reporting of the mine water release from the GKM to affected downstream stakeholders engaged in misconduct regarding said reporting; rather, OI found that the reporting was done in accordance with proper spill notification procedures. This ROI is being submitted to EPA senior management for informational purposes only.

In an effort to gather all available information concerning possible criminal and administrative misconduct connected to the GKM incident, OI Special Agents interviewed

(b) (6), (b) (7)(C), (b) (7)(E)

In addition, OI special agents reviewed

hundreds of emails and documents.

The USAO for the District of Colorado was consulted during all stages of the investigation.

During the course of this investigation, OI also investigated under a separate investigative cover a potential threat allegation made against a federal employee tasked with assisting in the response to the mine water release. The USAO for the District of Arizona was consulted on this matter and declined prosecution, and the investigation was subsequently closed.

### Possible criminal violations:

18 U.S.C. § 1001: False Statements

33 U.S.C. § § 1311 & 1319: Direct Discharge to Waters of the United States

42 U.S.C. § 9603(a): Notification Requirements Respecting Released Substances



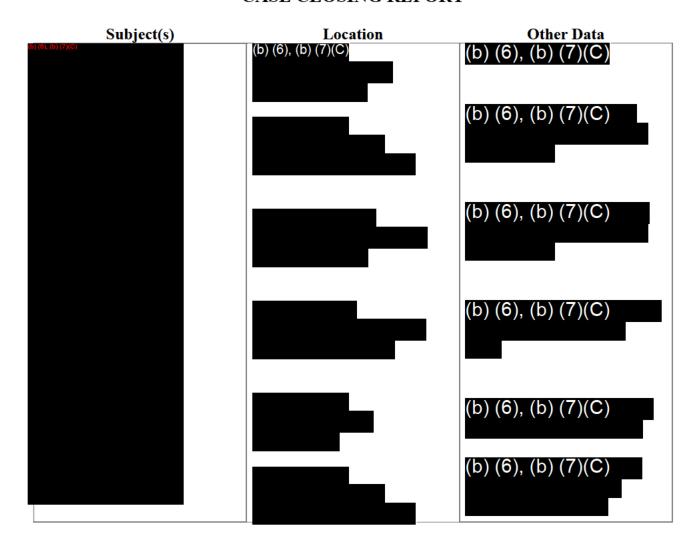
# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

1595 WYNKOOP STREET, 4<sup>th</sup> FLOOR DENVER, CO 80202

**DATE:** December 20, 2017 **PREPARED BY:** (6) (6) (6) (7) (6)

**TITLE:** Gold King Mine Incident (Animas River)

### CASE CLOSING REPORT



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### **VIOLATIONS:**

18 U.S.C. § 1001: False Statements

33 U.S.C. § § 1311 & 1319: Direct Discharge to Waters of the United States

42 U.S.C. § 9603(a): Notification Requirements Respecting Released Substances

### ALLEGATIONS:

Allegation 1: (b) (6), (b) (7)(C)

Allegation 2: The excavation (b) (6), (b) (7)(C)

, causing approximately three million gallons of mine water to be released

from the GKM.

Allegation 3: provided inconsistent information in from the EPA Office of Inspector General (OIG) Office of Investigations (OI) (b) (6), (b) (7)(C)

Allegation 4: In a September 2, 2015, letter to the OIG, Colorado Department of Natural Resources (CDNR), identified seven assertions alleged to be factually inaccurate made in a report (b) (6), (b) (7)(C) regarding CDNR's roles and responsibilities with respect to the release of mine water from the GKM on August 5, 2015.

Assertion 1: initially asserted that CDNR did not have any authority to manage, assess or approve any work at the GKM, but did not point to specific statements in the report alleging that it had.

Assertion 2: referred to the following quote from the Report, " "[f] or the Adit, a determination of no or low mine water pressurization was made by experienced professionals from EPA and the [CDNR]" and asserted that CDNR did not make any determination of mine water pressure at the GKM.

Assertion 3: referred to the following quote from the Report " "[t]he [CDNR] experts who supported the removal investigation..." " and asserted that CDNR staff did not support the removal investigation at the GKM.

Assertion 4: referred to the following quote from the Report ""[t]he Animas River Stakeholders Group had been given a presentation by (b) (6), (b) (7)(C)

with [CDNR], as documented in the May ARSG meeting summary" and asserted that presentation at the May 27, 2015, meeting of the ARSG was on the Red & Bonita Mine bulkhead design only.

Assertion 5: referred to the following quote from the Report " "[t]he [CDNR] experts supported the removal investigation at the Adit and were present at the site during the operations on August 4 and 5" " and asserted that CDNR was acting as a consultant on the Red & Bonita mine only, and was not involved with directing work at the GKM.

Assertion 6: refers to the following quote from the Report " "[t]he [CDNR] experts indicated that similar techniques have been employed at other similar mine sites. One [CDNR] expert noted that a similar investigation technique was implemented at the Captain Jack Mine in Colorado but did not result in a blowout" " and asserted that it is true that an impoundment was decanted/dewatered this way. This information was provided to the EPA as general advice only, and not for the purpose of managing, directing or authorizing any activity at the GKM.

Assertion 7: referred to the following quote from the Report ""[t]he EPA site removal investigation team had consulted with and had the field support of [CDNR]" and asserted that the EPA asked CDNR informally in the field for ideas on techniques for rehabilitation of the GKM portal and related inner-mine matters that might be addressed after the mine was dewatered. CDNR neither offered an opinion about, nor investigated, the amount of water impounded at the GKM or the water pressure that might be present, nor was it authorized to direct or manage any of the GKM work.

<u>Allegation 5:</u> In a September 18, 2015, letter to the OIG, Arizona Attorney General (AG) Mark Brnovich requested the EPA OIG to review the timeliness and methods of notification made to affected downstream stakeholders of the GKM following the August 5, 2015, release. AG Brnovich specifically noted how a failure to promptly notify affected personnel may be a violation of 42 U.S.C. § 9603(a).

**FINDINGS:** During the course of this investigation, interviews of EPA personnel, EPA contractors and representatives from the CDNR were conducted. A review of documentation related to the GKM site pre- and post-August 5, 2015, activities were also conducted.

Allegation 1: (b) (6), (b) (7)(C)

Allegation 2: The investigation was **inconclusive** as to whether the excavation (b) (6), (b) (7)(C) causing

approximately three million gallons of mine water to be released from the GKM.

Allegation 3: The investigation supported that provided inconsistent information over (b) (6), (b) (7)(C) interviews with Special Agents from the EPA OIG OI, (b) (6), (b) (7)(C)

<u>Allegation 4:</u> Assertions 1 and 4-7 were **not supported**; assertion 2 was **supported**; and assertion 3 was **inconclusive**.

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<u>Allegation 5:</u> The investigation did **not support** that the notifications made by personnel associated with the immediate release of mine water from the GKM on August 5, 2015, violated 42 U.S.C. § 9603(a).

#### **DISPOSITION:**

On September 21, 2015, the facts and circumstances surrounding the investigation of alleged factual inaccuracies made by the (b) (6), (b) (7)(C)

Summary Report based on the letter received by the OIG from were provided to Assistant United States Attorney (AUSA) Matt Kirsch, Chief, Criminal Division, United States Attorney's Office (USAO), District of Colorado, Denver, Colorado, for prosecution consideration. AUSA Kirsch stated that based on his review of all documentation provided, (b) (5), (b) (7)(E)

Therefore, his office declined criminal prosecution.

On September 29, 2015, the facts and circumstances surrounding the investigation of alleged delay in the timeliness and methods of notification to affected downstream stakeholders of the GKM following the August 5, 2015, release based on the letter received by the OIG from AG Brnovich was provided to AUSA Suneeta Hazra, Chief, Economic Crimes Section, USAO, District of Colorado, Denver, Colorado, for prosecution consideration. Based on the facts discovered during the course of the investigation, (b) (5), (b) (7)(E)

On October 6, 2016, the facts and circumstances surrounding (b) (6), (b) (7)(C) related to the August 5, 2015, release of mine water from the GKM was provided to AUSA Amanda Rocque, Civil Division, District of Colorado, USAO, Denver, Colorado. AUSA Rocque stated her office was declining civil litigation based on (b) (5), (b) (7)(E)

On November 4, 2016, the facts and circumstances surrounding (b) (6), (b) (7)(C) were provided to acting United States

Attorney Robert Troyer, USAO, District of Colorado, Denver, Colorado; as well as AUSAs Matt Kirsch and Hazra. Acting United States Attorney Troyer stated this investigation (b) (5), (b) (7)(E)

herefore, his office declined prosecution in this matter.

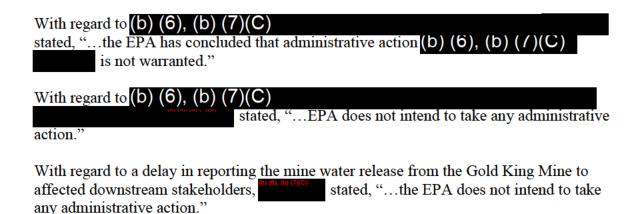
On May 5, 2017, the facts and circumstances surrounding (b) (6), (b) (7)(C) regarding the August 5, 2015, release of mine water from the GKM; the information provided by the (b) (6), (b) (7)(C) relative to the August 5, 2015, release of mine water from the GKM; and information related to the notification to downstream stakeholders of the August 5, 2015, release of mine water from the GKM, were provided to (b) (6), (b) (7)(C)

Denver, Colorado, for action deemed appropriate. On December 14, 2017, provided a memo to this office detailing the Agency's response to three aforementioned allegations. The memo detailed the following:

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All potential criminal, civil and administrative remedies have been addressed, and no further investigative activity is warranted. This case is closed.



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICE OF THE INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

1301 CONSTITUTION AVENUE, NW WASHINGTON, DC 20004

### REPORT OF INVESTIGATION CONCERNING

GOLD KING MINE INCIDENT (ANIMAS RIVER/
(b) (6), (b) (7)(C)

OI-HQ-2015-CFR-0108

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Distribution:

**Exhibits** 

Mike Flynn Acting Deputy Administrator United States Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, D.C. 20004 With Attachments

o) (6), (b) (7)(C)

Office of General Counsel
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20004
Informational Purposes Only
No Attachments

Submitted by:

(b) (6), (b) (7)(C)
Office of Investigations

Approved by:

(b) (6), (b) (7)(C)
Office of Investigations

Reviewed by:

Patrick Sullivan Assistant Inspector General Office of Investigations

# OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

CASE NO.: OI-HQ-2015-CFR-0108 DATE OPENED: August 13, 2015

CASE TITLE: GOLD KING MINE INCIDENT CASE AGENT:

(ANIMAS RIVER

CASE CATEGORY: Employee Integrity OFFICE: San Francisco Field Office

Denver, Colorado

JOINT AGENCIES: None JURISDICTION: District of

Colorado

### SECTION A - NARRATIVE

### Introduction

The United States Environmental Protection Agency (EPA) Office of Inspector General (OIG) Office of Investigations (OI) conducted an investigation related to the August 5, 2015, release of mine water at the Gold King Mine (GKM). The investigation was in response to an August 12, 2015, letter to EPA Inspector General Arthur Elkins Jr. from Representatives of the Committee on Oversight and Government Reform, House of Representatives, Congress of the United States. The committee requested the EPA OIG to conduct an independent investigation of the August 5, 2015, release of approximately three million gallons of mine water from the GKM in Silverton, Colorado. (Exhibit 1)

### Synopsis

During the course of this investigation, interviews of EPA personnel, EPA contractors and representatives from the Colorado Division of Natural Resources (DNR) were conducted. A review of documentation related to the GKM site pre- and post-August 5, 2015, activities were also conducted.

(b) (6), (b) (7)(C)

The investigation was inconclusive as to whether the excavation (b) (6), (b) (7)(C), causing approximately three

million gallons of mine water to be released from the GKM.

In addition, during the course of the investigation, an additional allegation was developed concerning the information provided to EPA OIG OI Special Agents (b) (6), (b) (7)(C). The investigation supported that provided inconsistent information over the course of interviews with Special Agents from the EPA OIG OI, (b) (6), (b) (7)(C)

### Possible violations:

18 U.S.C. § 1001: False Statements

33 U.S.C. § § 1311 & 1319: Direct Discharge to Waters of the United States

### Background

On August 5, 2015, representatives from the EPA and its contractors Environmental Restoration, LLC (Emergency and Rapid Response Services [ERRS]) and Weston Solutions, Inc. (Superfund Technical Assessment & Response Team) were conducting an investigation of the GKM to assess the on-going water release from the mine, treat mine water, and assess the feasibility of further mine remediation. On August 5, 2015, after excavation above the adit (an almost horizontal passage leading into a mine for the purposes of access or drainage) was complete, a spurt of water was noticed originating from the bedrock at or near the top of the adit, ultimately leading to the uncontrolled release of approximately three million gallons of mine water from behind the adit blockage into Cement Creek, a tributary of the Animas River a Traditional Navigable Water of the United States.

According to the EPA Team's Summary Report (Report), the GKM began operations sometime in the 1880s and continued until the 1900s, when it was closed. Mining had occurred at the GKM at seven different elevations through three adits: Level 7, Number 1 and the Sampson. The American Tunnel was constructed in the early mid-1900s below the GKM, as well as the Red & Bonita Mine (RBM.) Until its closure, the American Tunnel had effectively drained the GKM and the RBM. (Exhibit 2)

In 1986, Colorado issued a permit authorizing work at the GKM historic interconnected adits. A new adit was driven at the GKM to bypass a collapse in the original GKM Level 7 adit. This adit was the site of the August 5, 2015, release.

The Report indicated that sometime in 2005, following the 2002 closure of the American Tunnel, the RBM began discharging mine water at an approximate rate of 300 gallons per minute (gpm), and the GKM adit saw an increase in flow rate from approximately 42 gpm in July 2005 to 135 gpm in September 2005. In October 2006, the mine water flow rate at the GKM adit had increased to 314 gpm. In 2007, mine water at the GKM Level 7 adit breached the discharge ditch, resulting in conditions that led to a slope failure that ultimately filled the North Fork of Cement Creek with mine waste.

In 2008, the Colorado Division of Reclamation Mining & Safety (DRMS) a division within DNR constructed a discharge diversion structure to prevent future mine water saturation at the GKM Level 7 adit. In 2009, DRMS developed a plan that called for:

- 1) all four GKM adits to be backfilled; and
- 2) a pipe to be installed to divert the discharge.

Between 2009 and 2011, the GKM Level 7 mine saw a decrease in average flow rates from approximately 200 gpm to 140 gpm.

In 2014, the EPA planned to expose the GKM adit and was working with DRMS and the Animas River Stakeholder Group (ARSG) to identify actions that might be needed to reduce contaminant loading at Cement Creek and downstream waters. On September 11, 2014, prior to the beginning of site work, the flow rate was reportedly less than 13 gpm. Excavation work in 2014 discovered pipes in the adit tunnel blockage and additional pipes were installed into the same blockage, which were used to capture ongoing mine water drainage. This 2014 excavation work was suspended after the adit was backfilled and compacted with additional loads of crushed rock to maintain a stable surface at the adit for potential future work.

In 2015, the EPA resumed its plan to reopen the GKM adit. In January and May 2015, the ARSG held public meetings at which the EPA and DRMS presented their plans for work to be completed at the RBM. Because the RBM and GKM were interconnected, once the bulkhead at the RBM was installed, the process to open the GKM was to commence. According to information provided by DRMS, approximately three million gallons of mine runoff was released continuously through the discharge pipe from the GKM every 10 days prior to the August 5, 2015, blowout.

On August 4, 2015, excavation began in the area leading up to and alongside the GKM adit to remove consolidated soil and debris. The excavation goal was to expose, but not remove, the adit blockage. During this excavation, the adit blockage and mine timbers were exposed.

On August 5, 2015, excavation resumed above the previously exposed GKM adit blockage. During this excavation: (a) the ramp built to excavate above the GKM adit blockage made contact with the blockage, (b) the excavated soil from above the adit "buried" the adit blockage, (c) a large rock fell down and away from the unexcavated soil, and (d) water began to spurt out at or just slightly above the GKM adit brow. It took approximately 3 - 4 minutes for the spurt to grow into a flow of discolored water. It then took approximately 1 hour before the peak flow subsided.

#### **Details**

Allegation 1 has two subparts as noted below, with the information surrounding both findings located in the narrative portion following subpart 1(b).

# Allegation 1(a): (b) (6), (b) (7)(C)

Allegation 1(a) Findings: (b) (6), (b) (7)(C)

Allegation 1(b): The excavation that (b) (6), (b) (7)(C)

causing approximately three million gallons of mine water to be

released from the GKM.

Allegation 1(b) Findings: Inconclusive.

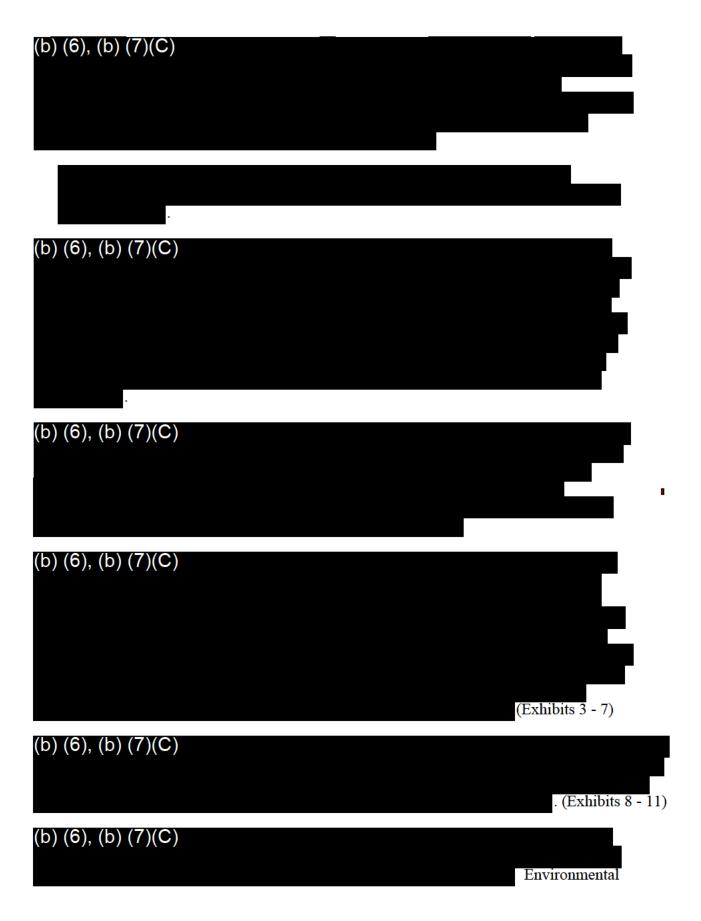
# (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

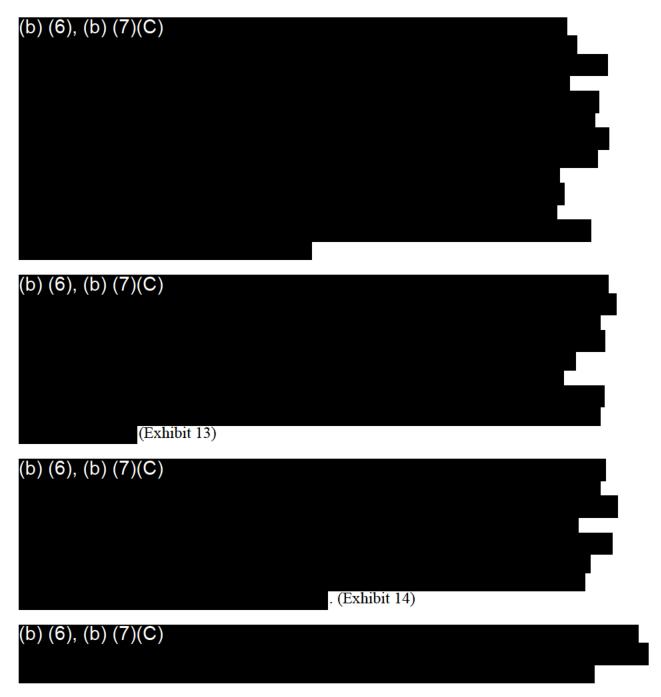
the work on the mine on August 4 and 5, 2015, was to prepare for an examination by the United States Department of the Interior's Bureau of Reclamation (BOR) on or about August 14, 2015, to assess whether a "stinger" pipe inserted into the adit might be the best solution for controlling an ongoing release of water from the GKM. According to information provided by DRMS, approximately three million gallon of mine runoff was released continuously through the discharge pipe from the GKM every 10 days prior to the August 5, 2015, blowout. This runoff flowed into the Cement Creek and into the Animas River.

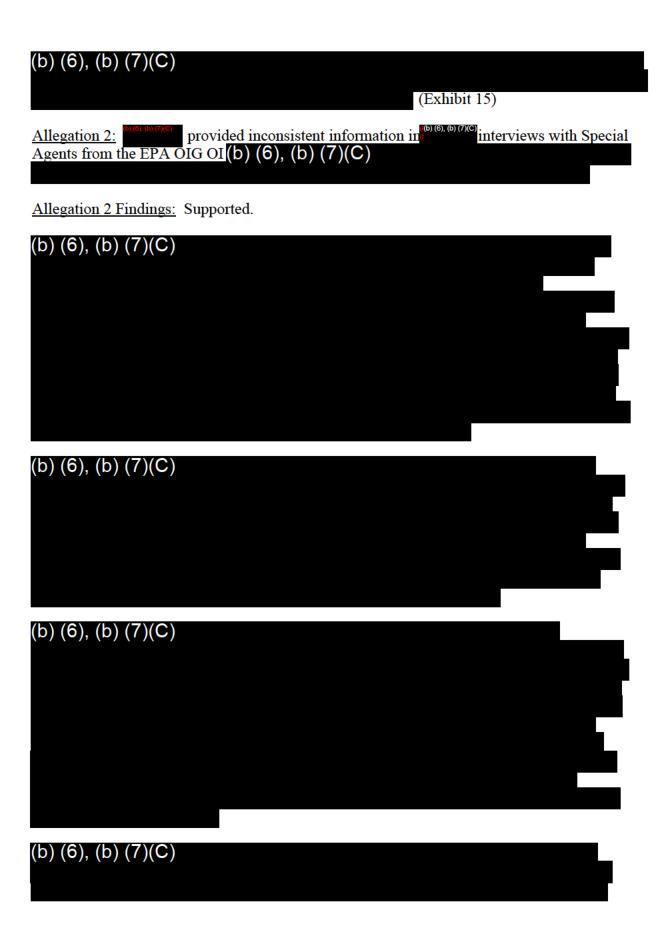


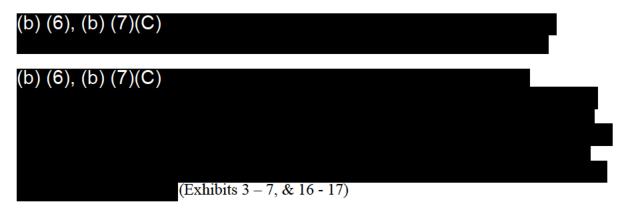




Restoration, LLC, is an ERRS contractor for the EPA and is the primary contractor for EPA activities at the RBM and GKM sites. The plan was to remove some of the loose dirt/rock above the adit to "get an idea of what the rock conditions were." Because so much of the rock was fractured, the search for "competent" rock was ongoing. Little by little, material was removed from above the adit, stopping intermittently to examine the area from where the material was removed. At some point during the excavation activities, someone noticed "a clear spring of water" coming out of an area "way above where anyone expected" water to be. Shortly after the water was noted, the discharge became discolored and the adit burst open, releasing a large quantity of water. (Exhibit 12)



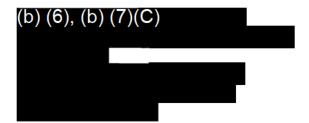




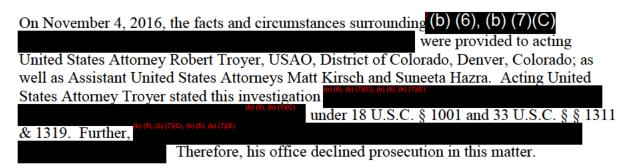
### Disposition

This Report of Investigation is being issued to the acting EPA Deputy Administrator for review and any administrative actions deemed appropriate.

### SECTION B - ENTITIES AND INDIVIDUALS



SECTION C – PROSECUTIVE STATUS



# **EXHIBITS**

DESCRIPTION	EXHIBIT
Congressional Request, dated August 12, 2015.	1
Summary Report, dated August 24, 2015.	2
Memorandum of Interview of dated August 20, 2015.	3
Memorandum of Interview of dated January 14, 2016.	4
Memorandum of Interview of dated February 24, 2016.	5
Transcript of (b) (6), (b) (7)(C) February 24, 2016, interview.	6
Memorandum of Interview of dated April 18, 2016.	7
Memorandum of Interview of dated August 21, 2015.	8
Memorandum of Interview of dated January 13, 2016.	9
Memorandum of Interview of dated February 25, 2016.	10
Memorandum of Interview of dated April 25, 2016.	11
Memorandum of Interview of (a) dated August 21, 2015.	12
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Memorandum of Activity of Rebuttal to BOR Report,	
dated November 11, 2015.	16
Bureau of Reclamation Report, dated October 2015.	17



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICE OF THE INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

1301 CONSTITUTION AVENUE, NW WASHINGTON, DC 20004

### REPORT OF INVESTIGATION CONCERNING

GOLD KING MINE INCIDENT (ANIMAS RIVER/COLORADO DEPARTMENT OF NATURAL RESOURCES ALLEGATION)
OI-HQ-2015-CFR-0108

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Distribution:

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No Attachments

Submitted by:

(b) (6), (b) (7)(C)

Office of Investigations

Approved by:

(b) (6), (b) (7)(C)

Office of Investigations

Reviewed by:

Patrick Sullivan Assistant Inspector General Office of Investigations

# OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

CASE NO.: OI-HQ-2015-CFR-0108 DATE OPENED: August 13, 2015

CASE TITLE: GOLD KING MINE INCIDENT

(ANIMAS RIVER/COLORADO DEPARTMENT OF NATURAL RESOURCES ALLEGATION)

CASE CATEGORY: Employee Integrity OFFICE: San Francisco Field Office

Denver, Colorado

CASE AGENT:

JOINT AGENCIES: None JURISDICTION: District of

Colorado

### SECTION A - NARRATIVE

### Introduction

The United States Environmental Protection Agency (EPA) Office of Inspector General (OIG) Office of Investigations conducted an investigation related to the August 5, 2015, release of mine water at the Gold King Mine (GKM) in response to a September 2, 2015, letter to the OIG from Color (GKM). Colorado Department of Natural Resources (DNR). The letter identified seven assertions alleged to be factually inaccurate that were made in a report (b) (6), (b) (7)(C) regarding DNR's roles and responsibilities with respect to the release of mine water from the GKM on August 5, 2015. (Exhibit 1)

### Synopsis

The investigation did not support that Assertions 1 and 4-7 regarding the roles and responsibilities played by the Colorado Division of Reclamation Mining & Safety (DRMS) a division within DNR surrounding the release of mine water from the GKM on August 5, 2015, were factually inaccurate. The investigation did support that Assertion 2, that is "for the Adit, a determination of no or low mine water pressurization was made by experienced professionals from EPA and the DRMS," was inaccurately reported. The investigation was inconclusive as to whether Assertion 3, that is " [t]he DRMS experts who supported the removal

investigation..." " was factually inaccurate.

### Possible violations:

18 U.S.C. § 1001: False Statements

### **Background**

On August 4 - 5, 2015, representatives from the EPA and its contractors Environmental Restoration, LLC (Emergency and Rapid Response Services) and Weston Solutions, Inc. (Superfund Technical Assessment & Response Team) were conducting an investigation of the GKM to assess the on-going water release from the mine, treat mine water and assess the feasibility of further mine remediation. On August 5, 2015, while excavating above the adit (an almost horizontal passage leading into a mine for the purposes of access or drainage), water began leaking, ultimately leading to the uncontrolled release of approximately three million gallons of mine water from behind the adit blockage into Cement Creek, a tributary of the Animas River.

According to the EPA Team's Summary Report (Report), the GKM began operations sometime in the 1880s and continued operations until the 1900s, when it was closed. Mining had occurred at the GKM at seven different elevations through three adits: Level 7, Number 1 and the Sampson. The American Tunnel was constructed in the early-to-mid- 1900s below the GKM, as well as the nearby Red & Bonita Mine. Until its closure, the American Tunnel had effectively drained the GKM and the Red & Bonita Mine. (Exhibit 2)

In 1986, Colorado issued a permit authorizing work at the GKM historic interconnected adits. A new adit was driven at the GKM to bypass a collapse in the original GKM Level 7 adit. This original GKM Level 7 adit was the site of the August 5, 2015, release.

The Report indicated that sometime in 2005, following the 2002 closure of the American Tunnel, the Red & Bonita Mine began discharging mine water at an approximate rate of 300 gallons per minute (gpm), and the GKM adit saw an increase in flow rate from approximately 42 gpm in July 2005 to 135 gpm in September 2005. In October 2006, the mine water flow rate at the GKM adit had increased to 314 gpm. In 2007, mine water at the GKM Level 7 adit breached the discharge ditch, resulting in conditions that led to a slope failure that ultimately filled the North Fork of Cement Creek with mine waste.

In 2008, DRMS constructed a discharge diversion structure to prevent future mine water saturation at the GKM Level 7 adit. In 2009, DRMS developed a plan that called for:

- 1) all four GKM adits to be backfilled; and
- 2) a pipe to be installed to divert the discharge.

Between 2009 and 2011, the GKM Level 7 mine saw a decrease in average flow rates from approximately 200 gpm to 140 gpm.

In 2014, the EPA planned to expose the GKM adit and was working with DRMS and the Animas River Stakeholder Group (ARSG) to identify actions that might be needed to reduce contaminant loading at Cement Creek and downstream waters. On September 11, 2014, prior to the beginning of site work, the flow rate was reportedly less than 13 gpm. Excavation work in 2014 discovered pipes in the adit tunnel blockage, and additional pipes were installed into the same blockage, which were used to capture ongoing mine water

drainage. This excavation work was suspended after the adit was backfilled and compacted with additional loads of crushed rock to maintain a stable surface at the adit for potential future work.

In 2015, the EPA resumed its plan to reopen the GKM adit. In January and May 2015, the ARSG held public meetings at which the EPA and DRMS presented their plans for work to be completed at the Red & Bonita Mine. Because the Red & Bonita Mine and the GKM were interconnected, once the bulkhead at the Red & Bonita Mine was installed, the process to open the GKM was to commence.

On August 4, 2015, excavation began in the area leading up to and alongside the GKM adit to remove consolidated soil and debris. The excavation goal was to expose, but not remove, the adit blockage. During this excavation, the adit blockage and mine timbers were exposed.

On August 5, 2015, excavation resumed above the previously exposed GKM adit blockage. During this excavation: (a) the ramp built to excavate above the GKM adit blockage made contact with the blockage, (b) the excavated soil from above the adit "buried" the adit blockage, (c) a large rock fell down and away from the unexcavated soil, and (d) water began to spurt out at or just slightly above the GKM adit brow. It took approximately 3 - 4 minutes for the spurt to grow into a flow of red/orange water. It then took approximately 1 hour before the peak flow subsided.

### <u>Details</u>

Allegation 1: In a September 2, 2015, letter to the OIG, identified seven assertions alleged to be factually inaccurate made in a report issued by (b) (6), (b) (7)(C) regarding DNR's roles and responsibilities with respect to the release of mine water from the GKM on August 5, 2015.

<u>Allegation 1 Findings:</u> Assertions 1 and 4-7: Not supported. Assertion 2: Supported. Assertion 3: Inconclusive.



On August 24, 2015, (b) (6), (b) (7)(C) released its Report regarding its assessment of the events and potential factors contributing to the blowout from the GKM on August 5, 2015.

**Assertion 1:** initially asserted that DRMS did not have any authority to manage, assess or approve any work at the GKM, but did not point to specific statements in the report alleging that it had. A review of the Report did not identify that DRMS personnel managed, directed or authorized any activity at the GKM. **Assertion 2:** referred to the following quote from the Report, ""[f] or the Adit, a determination of no or low mine water pressurization was made by experienced professionals from EPA and the DRMS" " and asserted that DRMS did not make any determination of mine water pressure at the GKM. During the course of this investigation, (b) (6), (b) (7)(C) were interviewed (b) (6), (b) (7)(C), they conceded that DRMS had not participated in any preliminary efforts to ascertain mine water pressure at the GKM. However, the investigation could not identify which (b) (6), (b) (7)(C) actually reported the inaccurate sentence (b) (6), (b) (7)(C) (Exhibit 3) Assertion 3: 76 referred to the following quote from the Report " "[t]he DRMS experts (b) (6), (b) (7)(C) who supported the removal investigation..." " and asserted that DRMS staff did not support the removal investigation at the GKM. DRMS' role in the area was to support work at the Red & Bonita Mine and monitor any effects work at that mine might have on mines in the vicinity. stated DRMS had a much longer history dealing When the OIG interviewed with the GKM than the EPA did. The EPA and DRMS worked jointly on the GKM (with or without a formal agreement in place); there was a long history of shared documentation, communication and attendance at each other's meetings and presentations; and DRMS was at the GKM on August 4 and 5, 2015, showing there was collaboration between the two entities. (Exhibit 4) explained that given the history of site, DRMS was viewed as the "lead partner" at the mine. DRMS prepared the 20-year plan for the GKM and stopped work in 2009, stating in site documents that further work would need to be done. DRMS supported the removal activities at the GKM given DRMS's role with the site. (Exhibit 5) Amongst the records (b) (6), (b) (7)(C) reviewed, no documentary evidence was identified that undermined what witnesses told them: that DRMS supported EPA's activities at the GKM. Further, the removal activities at the GKM were well known to DRMS officials, . When interviewed by the OIG, (b) (b), (b) (7)(C) agreed that the historical records, reports, graphs, diagrams and sketches related to the GKM, reviewed

by them and previously shared between the EPA and DRMS suggested DRMS personnel were both aware of and were at least solicited by the EPA for an opinion about the EPA activities at the GKM. (Exhibit 6)

explained that the explained tha

related that the overhead map attached to the Report was provided by DRMS and information about the GKM was part of that map. According to while no formal agreement existed for DRMS to consult on the GKM, there was definitely an informal working relationship and understanding amongst personnel working in that project area. (Exhibit 8)

During OIG's interview of (b) (6), (b) (7)(C), DRMS acknowledged that they did not make any objections to EPA's proposed activities at the GKM during a May 2015 presentation related to mine work at the Red & Bonita Mine and the GKM. (b) (6), (b) (7)(C), (b) (5)

Assertion 4: referred to the following quote from the Report ""[t]he Animas River Stakeholders Group had been given a presentation by (b) (6), (b) (7)(C) with DRMS, as documented in the May ARSG meeting summary" and asserted that (b) (6), (b) (7)(C) meeting of the ARSG was on the Red & Bonita Mine bulkhead design only.

During the EPA OIG investigation, (b) (6), (b) (7)(C) acknowledged that the presentation on May 27, 2015, to the ARSG, related to the Red & Bonita Mine bulkhead design. However, (b) (6), (b) (7)(C) pointed out that the Red & Bonita Mine and the GKM were interconnected, and once the bulkhead at the Red & Bonita Mine was installed, Environmental Restoration, LLC, was to begin the process to open the GKM. The treatment system at the Red & Bonita Mine was to be used to handle the water and muck from the GKM as work began there.

Assertion 5: referred to the following quote from the Report ""[t]he DRMS experts supported the removal investigation at the Adit and were present at the site during the operations on August 4 and 5"" and asserted that DRMS was acting as a consultant on the Red & Bonita mine only, and was not involved with directing work at the GKM. DRMS personnel were observers only with respect to the August 5, 2015, events and were not present at the time of the release.

Please refer to (b) (6), (b) (7)(C) comments in Assertion 3.

Assertion 6: refers to the following quote from the Report " "[t]he DRMS experts indicated that similar techniques have been employed at other similar mine sites. One

DRMS expert noted that a similar investigation technique was implemented at the Captain Jack Mine in Colorado but did not result in a blowout" " and asserted that it is true that an impoundment was decanted/dewatered this way. The method has worked, but at sites where there was no overpressure. Again, however, this information was provided to the EPA as general advice only, and not for the purpose of managing, directing or authorizing any activity at the GKM.

(b) (6), (b) (7)(C) explained that due to the collaborative nature of the relationship between the EPA and DRMS personnel, the DRMS recommendation of decanting/dewatering as an investigative technique was considered by the EPA. Neither the EPA nor DRMS personnel had any foreknowledge regarding the actual amount of water or overpressure that existed at the GKM on either August 4 or 5, 2015, prior to the blowout.

Assertion 7: referred to the following quote from the Report ""[t]he EPA site removal investigation team had consulted with and had the field support of DRMS" and asserted that the EPA asked DRMS informally in the field for ideas on techniques for rehabilitation of the GKM portal and related inner-mine matters that might be addressed after the mine was dewatered. DRMS neither offered an opinion about, nor investigated, the amount of water impounded at the GKM or the water pressure that might be present, nor was it authorized to direct or manage any of the GKM work.

Please refer to (b) (6), (b) (7)(C) comments in Assertion 3.

Additionally, stated the absence of any written evidence that DNR did not support the EPA excavation activities was not proof that DNR supported the activities. The EPA OIG informed the DNR group tha (b) (6), (b) (7)(C) agreed and commented that it would have been "unusual for any written concurrence" from DRMS for any activity the EPA was either considering or effecting at the GKM as it related to a removal investigation. The EPA would have been atypical and it would also have been atypical that DNR or the EPA would have produced written documentation accounting for any DNR objection to an EPA-proposed activity.

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stated that, in February 2015 had reviewed "cover-to-cover" the proposed plan for work and excavation activities at the GKM (b) (6), (b) (7)(C)

Further, stated had participated in an (b) (6), (b) (/)(C) planning meeting with related to proposed and anticipated removal activities at the GKM.
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### Disposition

This Report of Investigation is being issued to the acting EPA Deputy Administrator for any corrective action deemed appropriate.

### SECTION B - ENTITIES AND INDIVIDUALS

Name of Person: Title & Company: Role: Business Address: (b) (6), (b) (7)(C) Business Phone: (b) (b), (b) (1)( EPA Employee: Name of Person: Title & Company: Role: Business Address: (b) (6), (b) (7)(C) Business Phone: (b) (b), (c), (c) EPA Employee: Name of Person: Title & Company: Role: Business Address: (b) (6), (b) (7)(C) Business Phone: (b) (o), (d) (1)(C **EPA Employee:** Name of Person: Title & Company: Role: Business Address: (b) (6), (b) (7)(C) Business Phone: ((b) (b), (b) (7)( **EPA Employee:** Name of Person: Title & Company: Role: (b) (6). (b) (7) Business Address: (b) (6), (b) (7)(C) Business Phone: (b) (b), (c) (7)(C EPA Employee:

### SECTION C – PROSECUTIVE STATUS

On September 21, 2015, the facts and circumstances surrounding the DRMS letter authored by were provided to Assistant United States Attorney Matthew Kirsch, Chief, Criminal Division, United States Attorney's Office, District of Colorado, Denver, Colorado, for prosecution consideration. Assistant United States Attorney Kirsch stated after his review of the Report and [5] letter that it (b) (5), (b) (7)(E)

Therefore, his office declined prosecution in this matter.

# **EXHIBITS**

DESCRIPTION	EXHIBIT
Letter to the OIG, dated September 2, 2015.	1
Summary Report, dated August 24, 2015.	2
Memorandum of Interview of Group Interview of (b) (6), (b) (7)(C),	3
dated January 12, 2016.	
Memorandum of Interview of dated October 2, 2015.	4
Memorandum of Interview of dated October 7, 2015.	5
Memorandum of Interview of Group Interview of (b) (6), (b) (7)(C)	6
dated December 16, 2015	
Memorandum of Interview of dated October 9, 2015.	7
Memorandum of Interview of dated October 1, 2015.	8



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICE OF THE INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

1301 CONSTITUTION AVENUE, NW WASHINGTON, DC 20004

### REPORT OF INVESTIGATION CONCERNING

GOLD KING MINE INCIDENT (ANIMAS RIVER/ARIZONA ATTORNEY GENERAL ALLEGATION)
OI-HQ-2015-CFR-0108

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Distribution:	Submitted by:
Mike Flynn Acting Deputy Administrator United States Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, D.C. 20004	Office of Investigations
Informational Purposes Only With Attachments	Approved by:
(b) (6), (b) (7)(C) (b) (6), (b) (7)(C)	Office of Investigations
Office of General Counsel U.S. Environmental Protection Agency	Reviewed by:

Patrick Sullivan

Assistant Inspector General Office of Investigations

1200 Pennsylvania Avenue, NW

**Informational Purposes Only** 

Washington, D.C. 20004

No Attachments

# OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

CASE NO.: OI-HQ-2015-CFR-0108 DATE OPENED: August 13, 2015

CASE TITLE: GOLD KING MINE INCIDENT

(ANIMAS RIVER/ARIZONA ATTORNEY GENERAL

ALLEGATION)

CASE CATEGORY: Employee Integrity OFFICE: San Francisco Field Office

Denver, Colorado

CASE AGENT:

JOINT AGENCIES: None JURISDICTION: District of

Colorado

#### **SECTION A - NARRATIVE**

### **Introduction**

The United States Environmental Protection Agency (EPA) Office of Inspector General (OIG) Office of Investigations conducted an investigation related to the August 5, 2015 release of mine water at the Gold King Mine (GKM) in response to a September 18, 2015, letter to the OIG from Mark Brnovich, Attorney General (AG) for the state of Arizona. AG Brnovich requested the EPA OIG review the timeliness and methods of notification made to affected downstream stakeholders of the GKM following the release. (Exhibit 1)

#### Background

On August 4 - 5, 2015, representatives from the EPA and its contractors Environmental Restoration, LLC (Emergency and Rapid Response Services) and Weston Solutions, Inc. (Superfund Technical Assessment & Response Team [START]) were conducting an investigation of the GKM to assess the on-going water release from the mine, treat mine water and assess the feasibility of further mine remediation. On August 5, 2015, while excavating above the adit (an almost horizontal passage leading into a mine for the purposes of access or drainage) water began leaking, ultimately leading to the uncontrolled release of approximately three million gallons of mine water from behind the adit blockage into Cement Creek, a tributary of the Animas River.

### **Synopsis**

The investigation did not support the allegation that the timeliness and method of notifications that the EPA made to affected governments, tribal authorities, water providers and communities downstream of the GKM post release on August 5, 2015, were not completed in an effective and efficient manner.

### **Possible violations:**

42 U.S.C. § 9603(a): Notification Requirements Respecting Released Substances

### <u>Details</u>

Allegation 1: In a September 18, 2015, letter to the OIG, AG Brnovich requested the EPA OIG to review the timeliness and methods of notification made to affected downstream stakeholders of the GKM following the release. AG Brnovich specifically noted how a failure to promptly notify affected personnel may be a violation of 42 U.S.C. § 9603(a).

Allegation 1 Findings: Not Supported.

The National Response Center (NRC) is the federal government's national communications center, and is staffed 24 hours a day by United States Coast Guard officers and marine science technicians. The NRC is the sole federal point of contact for reporting all hazardous substances releases and oil spills. The NRC receives all reports of releases involving hazardous substances and oil that trigger federal notification requirements under several laws. (Exhibit 2)

Reports to the NRC activate the National Contingency Plan and the federal government's response capabilities. It is the responsibility of the NRC staff to contact the pre-designated On-Scene Coordinator (OSC) assigned to the area of the incident and to collect available information as to the size and nature of the release, the facility involved, and the party(ies) responsible for the release. In the case of the GKM incident, the pre-designated OSC was the EPA OSC. The NRC maintains reports of all releases and spills in a national database.

The letter from the AG's office refers to NRC Notification #1125293, dated August 10, 2015, wherein an anonymous caller provided notification of the release from the GKM. However, a previous notification to the NRC had been made.

NRC Report #1124824, dated August 5, 2015, details that Colorado Division of Reclamation, Mining and Safety (DRMS), Colorado Department of Natural Resources (DNR), Denver, Colorado, made telephonic contact with the NRC at 12:27PM MST on August 5, 2015, regarding the GKM release. This contact was made subsequent to all personnel in the immediate path of the fast-flowing water being moved to safety and cell service being established as (D)(6),(D)(7)(C) traveled toward Silverton, Colorado. (Exhibit 3)

Within 10 - 12 minutes of the NRC receiving the notification, the following entities were notified by the NRC: the Center for Disease Control; the Department of Homeland Security; the Coast Guard Investigative Service; Colorado Office of Emergency Preparedness & Response, Colorado Department of Public Health & Environment (CDPHE); the Colorado Information Analysis Center; the United States Department of Transportation Crisis Management Center; EPA Region 8; the National Infrastructure Coordination Center; the National Oceanic and Atmospheric Administration; the Colorado Oil & Gas Conservation

Committee; the United States Department of the Interior's Office of Environmental Policy and Compliance; and the United States Coast Guard District 8.

DRMS, DNR, Denver, Colorado, made telephonic contact with the CDPHE at 12:40PM MST on August 5, 2015, to inform CDPHE of the water release, as noted under CDPHE Case Number 2015-0492. Accordingly, CDPHE contacted the Colorado Water Quality Control Division, the Colorado Hazardous Materials and Waste Management Division, and the Colorado Parks and Wildlife. (Exhibit 4)

Region 8, EPA, was interviewed. (Exhibit 5) had no historical knowledge of the GKM prior to the August 5, 2015, release. Around 5:00PM MST on August 5, 2015, was informed there had been a "blow out" at the GKM. contacted EPA Region 8 Regional Administrator Shaun McGrath and information was shared regarding the mine water release and that nearby drinking water systems had been notified. Stated the management team relied on the people "on the ground" to have the procedures in place regarding dissemination of information to downstream stakeholders, in accordance with the Regional and Area Contingency Plans, for which the focus is on notification and potentially redundant notifications to the state, tribal and local jurisdictions located in the downstream jurisdiction. Later that same day, on and McGrath made telephonic contact with elected officials and federal agency heads in the areas likely to become the path of the mine water released from the GKM. Along with three Incident Commands representing EPA Regions 6, 8 and 9 that were already in place, an Area Command was established to facilitate coordinated efforts among the three Incident Commands.

Region 8, EPA, was interviewed. (Exhibit 6) On August 5, 2015, received a call from Region 8, EPA, and also received a report from the NRC and a notification from the CDPHE, all related to the GKM water release. Received a reviewed the NRC report and CDPHE notification, noting that the notification and report detailed notifications by both entities to downstream water users of the release.

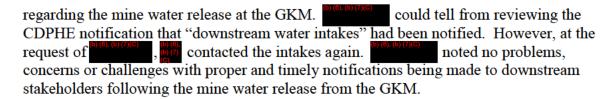
knowledge or previous experience with the GKM before the release. On August 5, 2015, was working in the Region 8 office and was notified of the release from a report DRMS had submitted.

DRMS had submitted.

Stated the notifications of the GKM release were done in accordance with the National Response System. Tribes with NRC agreements in place received spill notifications based on provided jurisdictional information and selected incident criteria contained in their agreement application.

Total Control C

for the EPA's START contract, was interviewed. (Exhibit 8) On August 5, 2015, (b) (6), (b) (7)(C) in the Region 8 (b) (6), (b) (7)(C) received a notification from the NRC and the CDPHE



### Disposition

This Report of Investigation is being issued to the acting EPA Deputy Administrator for informational purposes only.

#### SECTION B – PROSECUTIVE STATUS

On September 29, 2015, the facts and circumstances surrounding the letter from the Arizona AG were provided to Assistant United States Attorney Suneeta Hazra, United States Attorney's Office, District of Colorado, Denver, Colorado, for prosecution consideration.

(b) (5), (b) (7)(E) Therefore, her office declined

prosecution in this matter.

# **EXHIBITS**

DESCRIPTION	EXHIBIT
Letter from Arizona Attorney General, dated September 18, 2015.	1
Memorandum of Activity - Overview of NRC, dated August 24, 2015.	2
NRC Report #1124824, dated August 5, 2015.	3
CDPHE Report #2015-0492, dated August 5, 2015.	4
Memorandum of Interview of dated September 3, 2015.	5
Memorandum of Interview of dated August 21, 2015.	6
Memorandum of Interview of dated August 27, 2015.	7
Memorandum of Interview of of the day of the	8

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1. Case Closing Report
2. Transcript of
                         interview
3. Report of Investigation (ROI) on (b) (6), (b)
4. ROI on Colorado Department of Natural Resources (DNR)
5. ROI on Arizona Attorney General
6. Memorandum of Activity (MOA) on Animas River Jurisdictional
  Determination
7. Memorandum of Interview (MOI) of
                 presentation to the
8. MOA on
                 GKM plan schedule
MOA on
                     rebuttal to BOR report
10.MOA on
11.MOA on internal review documents
12.MOA on contract and plans review
           March 11, 2016, email of measurements
13.MOA on
14.MOI of
                      March 24, 2016, email of personnel
15.MOA on
                 February 19, 2016, email of diagrams
16.MOA on
17.MOA of DNR Memo
18.MOA of review of EPA Internal Review Summary
                  (regarding illustration)
19.MOI of
20.MOI of
21.MOI of
22.MOI of
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                           and EPA Agreement
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- 37.MOA on National Response Center Research
- 38.MOI of
- 39.MOI of
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FY Section Subsection Subject Creator Created 2015 2015 - 4921 - OPE-FY15-0059 - Gold King Mine Release -Planning A property of the property **Completion Table** Chad Kincheloe 09/02/2015 A. Administrative A <a href="#">♠</a> A Assignment Guide Kathrvn Hess 10/08/2015 A001 WP Status Key - Not a WP Chad Kincheloe 10/13/2015 △ △ A002 [C] Initial notification memo Naomi Rowden 11/02/2015 Naomi Rowden 11/02/2015 △ △ A003 [C] House Comittee on Oversight and Government Reform request letter △ △ A004 [C] Lettter from 6 Senators Naomi Rowden 11/02/2015 △ △ A004a [C] OIG request for clairifaction on Senate questions Naomi Rowden 11/02/2015 △ △ A004b [C] House Committee letter to IG on EPA Addendum and IG response Chad Kincheloe 12/23/2015 △ △ A004c Chad Kincheloe 03/29/2016 [C] House request for update A004d [R] OIG 6 29 16 status letter of OPE evaluation to House Chad Kincheloe 07/05/2016 △ △ A004e [R] OPE 6 29 16 status letter of OPE Evaluation to Senate Chad Kincheloe 07/05/2016 Naomi Rowden 10/20/2016 ICI Oct 2016 Senate Appropriations Committee Communications △ △ A004a 10-11-16 Meeting with Hill Staff Re Declination Tina Lovingood 11/04/2016 △ △ A004h [C]022217 Congressional Briefing Barry Parker 02/27/2017 IR106/12/17 GKM Report Congressional Briefing △ 🖒 A004i 06/13/2017 Barry Parker [C] Coordination with other OIG product lines Naomi Rowden 11/03/2015 A005a [C] OIG Coordination with DOD IG Chad Kincheloe 12/02/2015 △ △ A005b [R] OI Comments on OPE draft Chad Kincheloe 11/02/2016 △ △ A006 [C] November 4, 2015 Notification memo Naomi Rowden 11/02/2015 [C] PR Guide approval Naomi Rowden 11/03/2015 △ △ A007a [C]Guide - Status Chad Kincheloe 11/21/2016 [C] Request for Agency Emails [R] (b) (6), (b) (7)(C) Emails from OI △ 🌣 A008 Naomi Rowden 11/03/2015 Chad Kincheloe 12/31/2015 A008a [C ] Administrator Request to bring BOR GKM report issues/concerns to IG attention Naomi Rowden 11/03/2015 [C] OA response to Chad Kincheloe 11/18/2015 △ 📤 A010 interview [R] Agency Status Updates Naomi Rowden 12/28/2015 △ 🖎 A011 A011a [C] OIG 7/5/16 Notice of GKM suspension to EPA Chad Kincheloe 07/05/2016 △ △ A011b [C]10/12/16 OPE Resumes GKM work. **Barry Parker** 10/13/2016 △ △ A012 [C] EPA OIG/GAO Interaction Chad Kincheloe 02/01/2016 Naomi Rowden 05/17/2016 △ △ A013 [R] Project Direction A014 [C] GAO communication re Unsuspend OIG GKM work 10-13-16 Naomi Rowden 10/13/2016 [C] GAGAS Statement Barry Parker △ △ A015 01/26/2017 [not used]GAGAS Checklist - not used **Barry Parker** 01/27/2017

B. Background

FY	Section	Subsection	Subject	Creator	Created
<b>a p</b>	∌ B		Assignment Guide	Kathryn Hess	10/08/2015
A 🖒	∍ B002		[C] GKM Watershed Fact Sheet	Kathryn Hess	12/04/2015
A 🖒	▶ B003		[C] Animas River Stakeholders Group	Kathryn Hess	12/04/2015
A 🖒	∍ B004		[C]2007 USGS PP 1651 Ch C	Kathryn Hess	12/04/2015
A 🖒	<b>Ъ</b> В004а		2007 USGS PP 1651 Ch C DOCUMENT ONLY	Kathryn Hess	12/04/2015
A 🖒	∍ B005		[C]1978 Lake Emma Release	Kathryn Hess	12/04/2015
<u> </u>	∍ B006		[C]Spatial Relationship btwn R&BM and GKM	Kathryn Hess	12/04/2015
<u> </u>	∍ B007		[C] EPA general GKM info	Kathryn Hess	12/04/2015
<u> </u>	∍ B008		[C] Map of Area	Kathryn Hess	12/04/2015
<u> </u>	∍ B009		[C] BERA April 2015	Kathryn Hess	12/04/2015
A 🖒	∍ B010		[C] Summary Background section	Kathryn Hess	12/04/2015
<u> </u>	∍ B011		[C] GKM discharge flow rates	Kathryn Hess	12/04/2015
<u> </u>	∍ B012		[C] EPA Strategic Plan	Naomi Rowden	01/31/2017
A 🛍	b B013		[C] Mining Glossary	Naomi Rowden	02/01/2017
<b>A</b> (	∍ B014		[C]Region 8 Webpage	Barry Parker	02/06/2017
A 🛍	b B015		[C]NRC- DHS_USCG	Barry Parker	02/06/2017
	∍ B016		[C]EPA-Responsible Offices	Barry Parker	02/22/2017
	Ъ В017		[C]CO-Parks Wildlife	Barry Parker	02/23/2017
	∍ B018		[C]Abbreviations - NRC Notified	Barry Parker	02/23/2017
	∍ B019		[C] Abbreviations Used in OIG Reports	Barry Parker	02/28/2017
C. Cri					
A 🖒			Assignment Guide	Kathryn Hess	10/08/2015
	<b>b</b> C001		[C] CERCLA	Naomi Rowden	10/13/2015
	<b>b</b> C001a		[C] CERCLA response authority delegation flowchart	Naomi Rowden	10/20/2015
	<b>b</b> C002		[C] National Contingency Plan	Naomi Rowden	11/02/2015
	<b>b</b> C003		[C] Government Auditing Standards 2011	Naomi Rowden	02/09/2016
	<b>b</b> C004		[C] Region 8 Regional Contingency Plan	Naomi Rowden	11/01/2016
	<b>b</b> C005		[C] National Hardrock Mining Framework	Naomi Rowden	01/18/2017
	<b>b</b> C006		[C] Abandoned Mine Site Characterization and Cleanup Handbook	Naomi Rowden	01/18/2017
	<b>b</b> C008		[C] Summary of Criteria for Work EPA was Conducting at GKM	Naomi Rowden	01/18/2017
	14 Work a	at GKM			
A 🛍			Assignment Guide	Kathryn Hess	10/09/2015
	∍ D001		[C] SOW for portal opening June 2014	Kathryn Hess	10/09/2015
	∍ D002		[C] RFP for portal opening and support July 2014	Kathryn Hess	10/09/2015
	<b>b</b> D003		[C] Photos of 2014 work	Kathryn Hess	10/09/2015
	∍ D004		[C] PolRep1 092314	Kathryn Hess	10/09/2015
	<b>D</b> 005		[C] Enforcement Sensitive R8 Memo 022614	Kathryn Hess	10/09/2015
		at GKM throu			
<u> </u>	∌E		Assignment Guide	Kathryn Hess	10/09/2015

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	△ 🖒 E001	R	[C] ER Action - Work Plan May 2015	Kathryn Hess	10/09/2015
	🖴 🇀 E002		[C] Planned Schedule at GKM	Kathryn Hess	10/09/2015
	🖴 🖒 E002a		[C] Clarifications on Planned Schedule	Kathryn Hess	10/09/2015
	🖴 🇀 E003		[C] 2015 Operational Plan 052215	Kathryn Hess	10/09/2015
	🖴 🖒 E004		[C] Health and Safety Plan July 2015	Kathryn Hess	10/09/2015
	🖴 🖒 E004a		Companion file to E004	Kathryn Hess	10/09/2015
	🕮 🖒 E005		[C] Update from (5) (6) (7)(C) 050115	Kathryn Hess	10/09/2015
	🖴 🇀 E006		[C] Statement 10-22-15	Kathryn Hess	10/09/2015
	🖴 🇀 E007		[C] START account of 8/5/15	Kathryn Hess	10/09/2015
	🖴 🇀 E008		[C] account 08-16-15 with START photos	Kathryn Hess	10/09/2015
	🖴 🖒 E008a		[C Account 10-05-15	Kathryn Hess	10/09/2015
	🖴 🇀 E009		[C] account 10-27-15	Kathryn Hess	10/09/2015
	🖴 🍅 E009a		[C] account 11-11-15	Kathryn Hess	10/09/2015
	🖴 🖒 E010		[C] (b) (6), (b) (7)(C) Plans for 2015 work	Kathryn Hess	10/09/2015
	🖴 🖒 E010a		[C] (b) (6), (b) (7)(C) Comments on plan 021715	Kathryn Hess	10/09/2015
	🖴 🖒 E011		[C] Excavations 072915-080415	Kathryn Hess	10/09/2015
	🖴 🖒 E012		[C] ER photos	Kathryn Hess	10/09/2015
	🖴 🇀 E013		[C] Working Assumptions Sketch	Kathryn Hess	10/09/2015
	🖴 🖒 E901		[C] Summary - Details on work	Kathryn Hess	10/09/2015
	🖴 🇀 E902		[C] Summary - Material Difference between BOR and OIG information	Kathryn Hess	10/09/2015
	🖴 🇀 E903		[C] Summary - Pressure & Water Testing	Kathryn Hess	10/09/2015
	🖴 🇀 E904		[C] Summary Planning & Direct Testing	Barry Parker	10/26/2016
	🖴 🇀 E905		[C] Summary BOR compared to OIG	Barry Parker	10/26/2016
	🖴 🇀 E906		[C] Summary (b) (6), (b) (7)(C) - August 5 activities/cause	Barry Parker	10/26/2016
	F. Colorado DF	RMS			
	≙ r F		Assignment Guide	Kathryn Hess	10/09/2015
	🖴 🖒 F001		[C] 2008 Summary Report	Kathryn Hess	10/09/2015
	△ 🍅 F002		[C] 2009 Summary Report	Kathryn Hess	10/09/2015
	△ 🍅 F003		[C] 2012 3D Visualization	Kathryn Hess	10/09/2015
	△ 🍅 F004		[C] 2015 Grant Application	Kathryn Hess	10/09/2015
	🖴 🇀 F005		[C] DNR Letter to OIG 09-02-15	Kathryn Hess	10/09/2015
	🕮 🖒 F006		[C] DRMS website info	Kathryn Hess	10/09/2015
	🖴 🖒 F007		[C] 2002 BMPs	Kathryn Hess	10/09/2015
	G. Red and Bo	nita Mine			
	🕮 🗀 G		Assignment Guide	Kathryn Hess	10/09/2015
	🛎 🍅 G001	R	[C] Removal Action Memo 092414	Kathryn Hess	10/09/2015
	🕮 🖒 G002	R	[C] 2015 Fact Sheet 052215	Kathryn Hess	10/09/2015
	🖴 🇀 G003		[C] 2007 DRMS Rpt Structural Geologic Investigation	Kathryn Hess	10/09/2015
	H. EPA				

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	<b>△ №</b> H		Assignment Guide	Kathryn Hess	10/09/2015
	🕮 🖒 H001	R	[C] Internal Review of GKM Release 082415	Kathryn Hess	10/09/2015
	🕮 🖒 H001a		[C] Internal Review Addendum 12-08-15	Naomi Rowden	11/02/2015
	🕮 🖒 H002		[C] EPA Chief of Staff Emails to DIG	Naomi Rowden	11/02/2015
	🕮 🖒 H003		[C] EPA's request for meeting to discuss EPA's After Action/Hot Wash review	Naomi Rowden	11/02/2015
	🕮 🍅 H004		[C] EPA R6 and ICP SitReps	Naomi Rowden	11/02/2015
	🕮 🖒 H004a		[C] EPA Region 9 SitReps	Naomi Rowden	11/02/2015
	🕮 🖒 H004b		[C] R8 Sit Reps	Naomi Rowden	11/02/2015
	🕮 🍅 H005		[C] EPA Mining Team Presentation 111815	Naomi Rowden	11/19/2015
	🕮 🖒 H006		[C] 07-29-15 instruction email	Naomi Rowden	11/02/2015
	🕮 🍅 H007		Cell phone logs	Naomi Rowden	11/02/2015
	🕮 🖒 H008		[C] <u>ESA consu</u> ltation	Naomi Rowden	11/02/2015
	🕮 🖒 H008		[C] Emails	Naomi Rowden	11/02/2015
	🕮 🖒 H009		[C]EPA "Hotwash" Rpt-12/21/15	Barry Parker	10/18/2016
	🕮 🖒 H009a		[C] 11/04/16 After Action Status Update	Barry Parker	11/08/2016
	🕮 🖒 H010		[C] EPA GKM 1yr Rpt	Barry Parker	10/18/2016
	🕮 🖒 H011		[C] Notifications Action Plan	Barry Parker	10/18/2016
	🕮 🖒 H011a		[C] Sept 4 2015 OLEM Memo	Naomi Rowden	02/16/2017
	🕮 🖒 H012		[C] GKM 48hr Notifications	Barry Parker	11/01/2016
	🕮 🖒 H012a		[C] First Public Statement	Naomi Rowden	05/23/2017
	🕮 🖒 H013		[C] 09/09/15 GKM testimony	Barry Parker	11/02/2016
	🕮 🖒 H014		[C]EPA Transport/Fate Rpt-Jan2017	Barry Parker	01/17/2017
	🕮 🖒 H015		[C]Jan2017-IntheReviewMirrorRpt	Barry Parker	01/18/2017
	🕮 🖒 H016		[C]EPA JointInfoCener-Aug2015	Barry Parker	02/06/2017
	🕮 🖒 H017		[C]EPAactionsbyAug7,2015	Barry Parker	02/06/2017
	🕮 🖒 H018		[C]ASPECT Map	Barry Parker	02/06/2017
	🕮 🖒 H019		[C]EPA-PR-Aug8,2015	Barry Parker	02/06/2017
	🕮 🖒 H020		[C]EPA-PR-Aug9,2015	Barry Parker	02/06/2017
	🕮 🖒 H021		[C]Utah_DEQ-GKM-Updates	Barry Parker	02/07/2017
	🕮 🖒 H022		[C]Southern Ute - 09/16/15	Barry Parker	02/07/2017
	🕮 🖒 H023		[C]ADEQ - 08/10/15	Barry Parker	02/07/2017
	🕮 🖒 H024		[C]EPA Public Meetings	Barry Parker	02/07/2017
	🕮 🖒 H025		[C]Apr2017Mining Consul.Memo	Barry Parker	04/24/2017
	🖴 🖒 H026		[C]Feb 2017 Data Mgt Playbook	Barry Parker	04/24/2017
	🕮 🖒 H027		[C] Photos-GKM & Nearby Areas	Barry Parker	04/27/2017
	🖺 🖒 H0XX		not used (empty)	Naomi Rowden	11/02/2015
	I. Interviews				
	å <b>å</b> l		Assignment Guide	Kathryn Hess	10/08/2015
	🕮 🗀 1000		[C] Procedures for OPE Participation in OI Interviews	Kathryn Hess	10/09/2015

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-	<i>△</i> № 1001		[C] <sup>0,6,0</sup> <sub>7/6</sub> 081715 OSWER	Kathryn Hess	10/08/2015
	🖴 🇀 1002		[C 881715 R8 RA	Kathryn Hess	10/08/2015
	🖴 🖒 1003a		[C] 081915 081915 01 MOI	Naomi Rowden	10/08/2015
	🖴 🇀 1003b		[C] 081915 081915 OPE Addendum [C] 082015 (b) (6), (b) (7)(C) EOC	Naomi Rowden	10/08/2015
	🖴 🖒 1004			Kathryn Hess	10/08/2015
	🖴 🗀 1005a		[C] 082015 START, OI MOI	Kathryn Hess	10/08/2015
	🕮 🖒 1005b		[C] 082015 START, OPE Addendum	Kathryn Hess	10/08/2015
	🕮 🖒 1006a		[C] 082015 CO DMRS, OI MOI	Kathryn Hess	10/09/2015
	🖺 🍅 1006b		[C] 082015 CO DMRS, OPE Addendum	Kathryn Hess	10/09/2015
	△ 🍅 1007a		[C] 082015 082015 01 MOI	Kathryn Hess	10/09/2015
	△ 🍅 1007b		[C] 082015 082015 0PE Addendum	Kathryn Hess	10/09/2015
	△ 🍅 1008a		[C] 0(6, 6) 7(C) 082015 0(6, 6) 7 OI MOI	Kathryn Hess	10/09/2015
	△ 🍅 1008b		[C] 082015 OPE Addendum	Kathryn Hess	10/09/2015
	△ 🍅 1009a		082115 Environmental Restoration LLC, OI MOI	Kathryn Hess	10/09/2015
	△ 🍅 1009b		[C] 082115 Environmental Restoration LLC, OPE Addendum	Kathryn Hess	10/09/2015
	△ № 1010a		[C] 082115 Environmental Restoration LLC, OI MOI	Kathryn Hess	10/09/2015
	△ 🍅 1010b		[C] 700 082115 Environmental Restoration LLC, OPE Addendum	Kathryn Hess	10/09/2015
	△ 🖒 1011a		[C] 08.0 700 082115 Environmental Restoration LLC, OI MOI	Kathryn Hess	10/09/2015
	△ 🗀 1011b		082115 Environmetal Restoration LLC, OPE Addendum	Kathryn Hess	10/09/2015
	△ 🖒 I012a		082115 Environmental Restroation LLC, OI MOI	Kathryn Hess	10/09/2015
	△ 🖒 I012b		[C] 082115 Environmental Restoration LLC, OPE Addendum	Kathryn Hess	10/09/2015
	△ 🖒 I013a		[C] 082115 Environmental Restoration LLC, OI MOI	Kathryn Hess	10/09/2015
	△ 🖒 1013b		[Cities 082115 Environmental Restoration LLC, OPE Addendum	Kathryn Hess	10/09/2015
	△ 🖒 1014a		[C] 0 (7) 082115 0 (8) 0 (9) 0	Kathryn Hess	10/09/2015
	△ 🖒 I014b		C D/G 182115 OPE Addendum	Kathryn Hess	10/09/2015
	△ 🖒 1015a		[C] (0, (b) (7)(c) (0	Kathryn Hess	10/09/2015
	△ 🖒 1015b		[C] 082115 082115 R8, OPE Addendum [C 0700 082215 (b) (6), (b) (7)(C), OI MOI	Kathryn Hess	10/09/2015
	△ 🖒 1016a			Kathryn Hess	10/09/2015
	a № 1017a		[C   082615 CO DRMS, OI MOI	Kathryn Hess	10/09/2015
	△ 🖒 1018a		OI MOI	Kathryn Hess	10/09/2015
	△ 🗀 I018b		[C] 08.0 (7) 082715 08.0 (7) 082715 08.0 (7) 082715	Kathryn Hess	10/09/2015
	△ 🖒 I019a		[C] 082715 (100) OF MOI	Kathryn Hess	10/09/2015
	△ 🖒 1019b		[C] 082715 082715 0PE Addendum	Kathryn Hess	10/09/2015
	△ 🖒 1020a		[C176] 082715 08.00 OI MOI	Kathryn Hess	10/09/2015
	△ № 1020b		[C] 082715 OPE Addendum	Kathryn Hess	10/09/2015
	△ № 1021a		[C] 083115 08.0 R8, OI MOI	Kathryn Hess	10/09/2015
	a № 1021b		[C 083115 083115 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Kathryn Hess	10/09/2015 10/09/2015
	△ № 1022a		(b) (c) (b) (7)(C) (b) (7)(C)	Kathryn Hess	
	△ 🖒 l022b		[C] 091115 OEM, OPE Addendum	Kathryn Hess	10/09/2015

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	△ 🖒 I023a		[C] 090315(b) (6), (b) (7)(C) R8, OI MOI [C] 090315(b) (6), (b) (7)(C) R8 OPE Addendum	Kathryn Hess	10/09/2015
	🕮 🖒 1023b		[C] 090315 (b) (6), (b) (7)(C) R8 OPE Addendum	Kathryn Hess	10/09/2015
	🕮 🖒 1024a		[C 7/0] 090315 (b) (6), (b) (7)(C)	Kathryn Hess	10/09/2015
	🕮 🖒 1024b		090315 (b) (6), (b) (7)(C) , OPE Addendum	Kathryn Hess	10/09/2015
	🕮 🖒 1025a		[C] <sup>(6, 6)</sup> 090415 (b) (6), (b) (7)(C) Consulting, OI MOI	Kathryn Hess	10/09/2015
	🖴 🖒 1025b		[C] (b) (6), (b) (7)(C) Consulting, OPE Addendum	Kathryn Hess	10/09/2015
	🕮 🖒 I030		[C] Question 1 Summary- Statements on history, background and recent work at GKM	Kathryn Hess	10/09/2015
	🕮 🖒 I031		[C] Question 2 Interview Summary - Expertise of Personnel at GKM	Kathryn Hess	10/09/2015
	🖴 🖒 I032		[C] Summary- Account of Day of Release	Kathryn Hess	10/09/2015
	🕮 🖒 I033		[C] Question 11 and 12 Summary- Planning and Cause of Release	Kathryn Hess	10/09/2015
	🖴 🖒 I040		[C 7/6] 111015, BOR (b) (6), (b) (7)(C)	Kathryn Hess	10/09/2015
	🖴 🖒 I041		[C] 111815 BOR	Kathryn Hess	10/09/2015
	🖴 🖒 I042		[C o BOR 111915 USGS, (b) (6), (b) (7)(C) to BOR	Kathryn Hess	10/09/2015
	🖴 🖒 I043		$[C]_{0(0)}^{(0,0)}$ 112315 USACE (0) (6), (0) (7)(C)	Kathryn Hess	10/09/2015
	🖴 🖒 1044		[C] 112315 USACE (b) (6), (b) (7)(C) [C] 112315 BOR (b) (6), (b) (7)(C)	Kathryn Hess	10/09/2015
	🖴 🖒 I045		[C] 113015 India (India)	Kathryn Hess	10/09/2015
	🖴 🖒 I046		[C] 120115 BOR report	Kathryn Hess	10/09/2015
	🖴 🖒 I047		[C] 7(6) 120215 BOR	Kathryn Hess	10/09/2015
	a 🖒 1048		[C] 121415 OSRTI ARD Continued on 122115	Kathryn Hess	10/09/2015
	a 🍅 1049		[C] EPA(b) (6), (b) (7)(C) [R] EPA(b) (6), (b) (7)(C) interview 12-16-15	Kathryn Hess	10/09/2015
	<i>△</i> 1050		[R] EPA (b) (6), (b) (7)(C) interview 12-16-15	Kathryn Hess	10/09/2015
	△ 🖒 1051a		[R] DNR 011216, OI MOI	Kathryn Hess	10/09/2015
	△ 🖒 1051b		[C] DNR 011216, OPE Addendum	Kathryn Hess	10/09/2015
	△ 🍅 1052a		[R] 07 011316 01 MOI	Kathryn Hess	10/09/2015
	△ 🖒 1052b		[Cincol 011316 DPE Addendum	Kathryn Hess	10/09/2015
	△ 🍅 1053a		[C] 0 (8, 6) (7) 0 011416 0 (8, 6) (7) OI MOI	Kathryn Hess	10/09/2015
	△ 🖒 1053b		[C] 011416 OPE Addendum	Kathryn Hess	10/09/2015
	<i>△</i> № 1054		[C 70 0 022516 01 MOI	Naomi Rowden	12/21/2016
	△ 1055		[R] 2/24/16 OI Interview	Naomi Rowden	02/22/2017
	<i>△</i> № 1056		[C] 7(C) 3-3-16 MOI	Naomi Rowden	03/21/2017
	△ 1057		4-18-16 MOI	Naomi Rowden	03/21/2017
	<i>△</i> № 1058		[C] 677 4-25-16 MOI	Naomi Rowden	03/21/2017
	△ 🗀 I100		Site Visit 8/20/15	Kathryn Hess	10/09/2015
	J. Other Feder	aı	And and O th	IZ-all-a	10/14/0015
	△ 🖒 J		Assignment Guide	Kathryn Hess	10/14/2015
	△ 🖒 J001		[C] USGS Estimated Volume of Release	Kathryn Hess	10/14/2015
	△ 🖒 J101		[C] BOR R&B Mine	Kathryn Hess	10/14/2015
	△ 🖒 J200		[C] BOR Technical Evaluation Report	Kathryn Hess	10/14/2015
	△ 🖒 J201		[C] BOR External Review Peer Reviewer Comments	Kathryn Hess	10/14/2015

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△ 🖒 J401		[C]USACE Early Brainstorm	Kathryn Hess	10/14/2015
K. TEAM MEET	TINGS			
△		Assignment Guide	Chad Kincheloe	10/26/2015
🕮 📝 K001		[C] Meetings with AIG & others	Chad Kincheloe	10/26/2015
🕮 🖒 K002		[C] team meetings	Chad Kincheloe	11/23/2015
L. Expertise of	Personnel			
🕮 🗀 L		Assignment Guide	Naomi Rowden	11/04/2015
🕮 🖒 L001		[C] employment docs - PII	Naomi Rowden	11/04/2015
🖴 🇀 L002		[C] 6 (7) employment docs - PII [C] Resume	Naomi Rowden	11/04/2015
🖴 🖒 L003		[C] Resume	Naomi Rowden	
🖴 🇀 L004		[C] OSC Position Description	Naomi Rowden	12/07/2015
🖴 🖒 L005		[C] biographical sketch	Naomi Rowden	12/15/2015
🕮 🖒 L006		[C] OSWER memo on GKM personnel expertise (Internal review addendum attachment 3)	Naomi Rowden	12/15/2015
🕮 🖒 L006a		[C] OSC Training Guidelines	Naomi Rowden	02/11/2016
🖴 🗀 L007		[C] EPA HR Info - PII	Naomi Rowden	02/10/2016
🕮 🖒 L008		[C] Contractor Information	Naomi Rowden	02/11/2016
🖴 🖒 L010		[C] Summary on Expertise (answers Senate Q 2)	Naomi Rowden	12/15/2015
M. Contracts				
△ 🖒 M		Assignment Guide	Kathryn Hess	11/13/2015
△ 🍅 M	0000	R-2 OA's Audit Plan	MingD Chang	02/16/2016
△ 🍅 M	0001	R-2 Contract DocumentsERRS	MingD Chang	11/17/2015
△ 🍅 M	0001a	R-2 Review of Prior Reports0001a	MingD Chang	12/02/2015
_	0001b	R-2 Review of R8's Source Selection Package	MingD Chang	12/10/2015
_	0001c	R-2 Contractor Selection	MingD Chang	02/10/2016
_	0002	R-2 Task Order 51 Gold King Mine	MingD Chang	11/17/2015
_	0003	R-2 ER's Program Manager	MingD Chang	12/17/2015
_	0003a	R-2 ER's <u>Respon</u> se Manager	MingD Chang	12/17/2015
_	0003b	R-2 ER's	MingD Chang	12/17/2015
_ ⊘ M	0003b	R-2 ER's (b) (6), (b) (7)(c)	MingD Chang	12/17/2015
≙ ⊯ M	0003d	R-2 ER's (b) (6), (b) (7)(C)	MingD Chang	12/17/2015
≙ ⊯ M	00034	R-2 EPA's (6), (6) (7) (7)	MingD Chang	12/17/2015
⊕ po IVI ⊕ po M	0004 0004a	R-2 EPA (6, 6) (7) (6) (7) (7)	MingD Chang	12/17/2015
△ 🌣 M	0004a 0004b	R-2 OSC Key Responsibilities	MingD Chang	02/03/2016
A M € A	0004c	R-2 Criteria Employee vs Contractor	MingD Chang	02/11/2016
A M € A	0005	R-2 Requesting Subk Data for OPE	MingD Chang	02/18/2016
<b>△ △</b> M	0005a	R-2 OPE's Request for Subk Data under TO 51	MingD Chang	02/19/2016
△	0005b	R-2 Request for DNR's Billing Statement	MingD Chang	02/19/2016
△ 🍅 M	0006	R-2 Inquiry on Prime's Performance Bond	MingD Chang	02/19/2016
🖴 🗀 M	0006a	R-2 What's the Proper Route/Data to Requust from the Subk	MingD Chang	02/19/2016

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	<b>△ △ M</b>	0006b	R-2 OI's Inquiry on DNR's IAG Billing	MingD Chang	02/19/2016
	🕮 💪 M	0010	R-2 Summary on Q3	MingD Chang	02/04/2016
	🖴 🗀 M	0011	R-2 Report Indexing	MingD Chang	02/06/2017
	N. Indemnificat	ion			
	🕮 🗀 N		Assignment Guide	Kathryn Hess	11/13/2015
	🖴 🗀 N	0000	R-2 OA's Audit Plan	MingD Chang	02/25/2016
	🖴 🗀 N	0001	R-2 Superfund Determination	MingD Chang	11/19/2015
	🖴 🗀 N	0001a	R-2 CERCLA Information	MingD Chang	11/24/2015
	🖴 🗀 N	0002	R-2 CERCLA/SARA FA LiabilityPT 1	MingD Chang	11/19/2015
	🖴 🗀 N	0003	R-2 CERCLA/SARA FA LiabilityPT 2	MingD Chang	11/19/2015
	🖴 🗀 N	0004	R-2 Performance Bond	MingD Chang	12/14/2015
	🕮 🗀 N	0010	R-2 Summary of Q9	MingD Chang	02/08/2016
	🖴 🗀 N	0011	R-2 Report Indexing	MingD Chang	02/06/2017
	O. Independen	ce of DOI As			
	🖴 💪 O		Assignment Guide	Chad Kincheloe	11/19/2015
	🕮 🗀 0001		[C] OSWER on Independence of BOR technical evaluation	Chad Kincheloe	11/19/2015
	🖺 🖒 0002		[C] BOR-EPA IA and WAF 13	Naomi Rowden	12/15/2015
	△ 🍅 O003		[C] DOI-EPA IAs and tasking for Technical Evaluation and Peer Review	Naomi Rowden	12/15/2015
	<sup>△</sup>		[C] EPA-USACE agreements for Peer Review	Naomi Rowden	12/15/2015
	△ 🍅 O005		[C] BOR TSC Information	Naomi Rowden	02/11/2016
	<sup>△</sup>		[C] ASCE Information	Naomi Rowden	02/11/2016
	△ 🍅 O007		[C] DOI Scientific Integrity Policy	Naomi Rowden	02/11/2016
	△		[C] Agency announcements of Independent review	Naomi Rowden	02/11/2016
	△ 🍅 O008a		[C] EPA Congressional Testimony	Naomi Rowden	02/25/2016
	△ 🍅 O009		[C] USACE brainstorming document	Naomi Rowden	02/11/2016
	△ 🍅 O010		[C] Summary on Independence of BOR technical evaluation	Naomi Rowden	12/15/2015
	P. GKM post re	elease	And and Other	Kallara Harr	00/40/0046
	△		Assignment Guide	Kathryn Hess	02/19/2016
	△ № P001		[C] 2015 Deere&Ault Drawings of Adit post release	Kathryn Hess	02/19/2016
	△ № P002		[C]2016 EPA Memo on planning	Kathryn Hess	02/19/2016
	△ № P003		[C] GKM Release 2016 Action Memo	Kathryn Hess	02/19/2016
	△ № P004		[C] 2016 Animas River at Durango Report	Kathryn Hess	02/19/2016
	Q. EPA OIG		NOT USED	Barne Darker	10/27/2016
	Q. GKM Phase	. 2	NOT 05ED	Barry Parker	10/2//2010
	©. GRW Fliase	: 2	Assignment Guide	Barry Parker	10/27/2016
	= <b>G</b> Q		Assignment Guide [C] 10/20/16	Barry Parker	10/27/2016
	a		[C] Summary - Reporting Requirements	Naomi Rowden	11/01/2016
	a		[C] Summary - Communication Requirements	Naomi Rowden	11/01/2016
	□ M Q003		[6] Summary - Communication Requirements	ivaoiiii nowdeli	1 1/0 1/20 10

FY	Section	Subsection	Subject	Creator	Created
	△ 🖒 Q004		[C] Summary - Facts of Reporting and Communication	Naomi Rowden	11/01/2016
	🖴 🖒 Q004a		[R] Notification Requirements Tables	Naomi Rowden	05/17/2017
	🕮 🖒 Q005		[C] Summary - Notification Design To Inform	Barry Parker	10/27/2016
	🖴 🖒 Q006		[C] Summary - Delay in Notification)	Barry Parker	10/27/2016
	🖴 🖒 Q007		[C] Summary - Additional Notification Policies	Barry Parker	10/27/2016
	🖴 🇀 Q008		[R] Phase 2 PR Guide	Chad Kincheloe	11/01/2016
	🕮 🖒 Q008a		[c] Assignment Guide Steps	Naomi Rowden	11/21/2016
	🖴 🇀 Q009		[C] 11-09-16 OLEM response to OIG questions	Naomi Rowden	11/12/2016
	🖴 🇀 Q009a		[C] OLEM Response Region 6 Supporting Docs	Naomi Rowden	11/14/2016
	🕮 🖒 Q009b		[C] OLEM Response Region 8 Supporting Docs	Naomi Rowden	11/14/2016
	🕮 🖒 Q009c		[C] OLEM Response Region 9 Supporting Docs	Naomi Rowden	11/14/2016
	🖴 🇀 Q010		[C] 12/14/16 OLEM response to OIG questions	Barry Parker	12/19/2016
	🖴 🇀 Q011		[C]01/13/17 OIG Ques.to OLEM	Barry Parker	01/17/2017
	🕮 🖒 Q012		[C]01/23/17 OIG Ques.to Agency	Barry Parker	01/26/2017
	🖴 🇀 Q013		[C] Response terminology and use	Naomi Rowden	02/06/2017
	🖴 🖒 Q014		[C]Summary-OtherRelevant MiningDocs	Barry Parker	02/08/2017
	🕮 🖒 Q015		[C]GKM 2014/2015 EPA work	Barry Parker	02/09/2017
	🖴 🇀 Q016		[C] Other GKM Rpt Recommendations	Barry Parker	02/10/2017
	🕮 🖒 Q017		[C] Navajo Nation August 7, 2015 Precautionary Notice	Naomi Rowden	02/15/2017
	🖺 🖒 Q018		[C] Assignment 16 issues	Barry Parker	02/28/2017
	🕮 🖒 Q.100		[C] 11/23/16 GKM2 DD to PLD	Barry Parker	11/28/2016
	🖺 🖒 Q.100a		[C]PLD Rev. DiscDoc	Barry Parker	12/20/2016
	🕮 🖒 Q.100b		[C] PLD DD Rev-01/13/17	Barry Parker	01/17/2017
	🕮 🖒 Q.200		[C] MILESTONES Estimate (Dec. 2016)	Barry Parker	12/19/2016
	🕮 🇀 Q.201		[C]AIG DD Review	Barry Parker	01/04/2017
	🕮 🖒 Q.202		[C] DIG DiscDraft Review	Barry Parker	03/27/2017
	🖴 🇀 Q.300		[C]OCPA Editor Review	Barry Parker	02/02/2017
	△ 🍅 Q.400		[C] OC Review	Barry Parker	02/09/2017
	🕮 🇀 Q.500		[C]QA Referencer Review	Barry Parker	03/02/2017
	R. Reporting				
	△		Assignment Guide	Kathryn Hess	10/08/2015
	🕮 🗀 R001		[R] OA answers to 2 questions	Chad Kincheloe	05/03/2016
	△ 🌣 R002		[C] OI Timeline	Naomi Rowden	03/09/2017
	△ 🍅 R003		[R] OI timeline reporting	Naomi Rowden	03/09/2017
	△ 🍅 R010a	DD-1	Cover, AAG - Scope/Methodology Indexes	Barry Parker	01/26/2017
	△	DD-1	SAVE CONFLICT - NOT A WP Cover, AAG - Scope/Methodology Indexes	Barry Parker	01/26/2017
	△	DD-2	Results, Issues 1-5 Indexes	Barry Parker	01/26/2017
	△	DD-2	SAVE CONFLICT- NOT A WP -Results, Issues 1-5 Indexes	Barry Parker	01/26/2017
	🕮 🖒 R010b	DD-2	SAVE CONFLICT NOT A WP Results, Issues 1-5 Indexes	Barry Parker	01/26/2017

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	△ 🖒 R010b	DD-2	SAVE CONFLICT NOT A WP Results, Issues 1-5 Indexes	Barry Parker	01/26/2017
	🕮 🖒 R010b	DD-2	SAVE CONFLICT NOT A WP Results, Issues 1-5 Indexes	Barry Parker	01/26/2017
	🕮 🖒 R010c	DD-3	R-2 Issues 6-7 Indexes	Barry Parker	01/26/2017
	🕮 🖒 R010d	DD-4	Issues 8 -9 Indexes	Barry Parker	02/15/2017
	🕮 🖒 R010d	DD-4	SAVE CONFLICT - NOT A WP Issues 8 -9 Indexes	Barry Parker	02/15/2017
	🕮 🖒 R010e	DD-5	Issues 10 -16, Appendices A & B	Barry Parker	01/26/2017
	🕮 🖒 R010e	DD-5	SAVE CONFLICT NOT A WP Issues 10 -16, Appendix A	Barry Parker	01/26/2017
	🕮 🖒 R010f	+ DD	[C] INDEX LSR Changes	Barry Parker	03/15/2017
	🕮 🖒 R011		[C] Discussion Document PM and PLD Certification	Chad Kincheloe	02/23/2017
	🕮 🖒 R012		[R]Quality Assurance Checklist	Barry Parker	02/27/2017
	🕮 🖒 R013	DD	[C] 03/24/17 Disc. Doc. to Agency	Barry Parker	03/27/2017
	🕮 🖒 R013a	DD	[R] 04/10/17 EPA/OIG DD Mtg. & Followup	Barry Parker	04/11/2017
	🕮 🖒 R013b	DD	[C]04/25/17 (b) (6) (b) (7)(C) DD Issue 16	Barry Parker	04/26/2017
	🕮 🖒 R014	DD	[C] 03/28/17 DD to DOI/BOR	Barry Parker	03/28/2017
	🕮 🖒 R015	DD	[C] 03/28/17 DD to CO DRMS	Barry Parker	03/28/2017
	🕮 🖒 R015a	DD	[C] DRMS/OIG 04/13/17 mtg.	Barry Parker	04/13/2017
	🕮 🖒 R016		[C]04/13/17 DD to	Barry Parker	04/17/2017
	🖴 🇀 R017		[C] Disc Document to Final Report	Naomi Rowden	04/24/2017
	🕮 🖒 R018		[R] PLD review of Final	Naomi Rowden	05/01/2017
	🕮 🍅 R019		[R] AIG review of Final	Naomi Rowden	04/26/2017
	🕮 🖒 R020		[R] OCPA Editors review of Final	Naomi Rowden	05/01/2017
	🕮 🖒 R021		[R] QA Referencer review of Final	Naomi Rowden	05/01/2017
	🕮 🖒 R022		[R] OC Legal review of Final	Naomi Rowden	05/01/2017
	🕮 🖒 R023		[R] DIG review of Final	Naomi Rowden	05/01/2017
	🖴 🇀 R024		[R] final report issued	Chad Kincheloe	06/05/2017
	🕮 🖒 R030a	Final-1	[IP] Cover, AAG - Scope/Methodology Indexes	Barry Parker	05/01/2017
	🕮 🖒 R030b	Final-2	[IP] Issues 1-5 Indexes	Barry Parker	05/01/2017
	🕮 🖒 R030c	Final-3	[IP]Issues 6-7 Indexes	Barry Parker	05/01/2017
	🕮 🖒 R030d	Final-4	[IP]Issues 8-9 Indexes	Barry Parker	05/01/2017
	🕮 🖒 R030e	Final-5	[IP]Issues 10-16, Append.A & B	Barry Parker	05/01/2017
	🕮 🖒 R030f		[C] Final Report Certification	Chad Kincheloe	05/05/2017
	🕮 🖒 R030g		[IP] Post-DIG Review QA at aag to issue 7 Final Report changes	Naomi Rowden	05/18/2017
	🕮 🖒 R030h		[C] post DIG final QA issues 8-16 and appendix A	Chad Kincheloe	05/30/2017
	🕮 🖒 R.100		[no review necessary] Chad INDEX Work Space not a official wp	Barry Parker	11/28/2016
	🕮 🖒 R.101		[no review necessary] Naomi INDEX Work Space	Barry Parker	11/28/2016
	🕮 🖒 R.102		[no review necessary] Barry INDEX Work Space	Barry Parker	11/28/2016
	△ 🌣 R.900	import file	[no review necessary]"Dec8-GKM2-DiscDoc-Clean"	Barry Parker	12/12/2016